

## CURRICULUM VITAE

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### Part I: General Information

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(b) (6)

### Education:

1976-1982	B.A.	University of Pennsylvania, Philadelphia, PA
1981-1985	M.D.	University of Pennsylvania, Philadelphia, PA

### Postdoctoral training:

1985-1986	Intern in Medicine, University of Massachusetts Medical Center
1986-1988	Resident in Medicine, University of Massachusetts Medical Center
1989-1992	Research Fellow in Medicine, Harvard Medical School
1989-1992	Clinical/Research Fellow in Diabetes and Endocrinology, Joslin Diabetes Center

### Licensure and Certification:

1987	Massachusetts State Medical License
1988	American Board of Internal Medicine
1991, 2001	American Board of Endocrinology and Metabolism

### Academic Appointments:

1992-2001	Instructor in Medicine, Harvard Medical School
2001-2008	Assistant Professor of Medicine, Harvard Medical School
2008-	Associate Professor of Medicine, Harvard Medical School

### Hospital or Affiliated Institution Appointments:

1992-1994	Research Associate, Section of Cellular and Molecular Physiology, Joslin Diabetes Center
1992-	Associate Physician, Brigham and Women's Hospital, Boston, MA
1994-	Investigator, Section of Cellular and Molecular Physiology, Joslin Diabetes Center
1997-	Courtesy Staff, Beth Israel-Deaconess Medical Center, Boston, MA
2008-	Head, Section of Clinical Research, Joslin Diabetes Center, Boston, MA

### Other Professional Positions:

1985	Externship in Public Health Service, Wind River Indian Reservation
1988	Visiting Physician, Dangriga District Medical Center, Dangriga, Belize
1988	Attending Physician, Department of Urgent Care, The Fallon Clinic
1992-1999	Diabetes Inpatient Attending, Brigham and Women's Hospital

**Hospital and Health Care Organization Service Responsibilities:**

1999-2001 Diabetes Inpatient Attending, Beth Israel Deaconess Medical Center  
1999-2003 Medical Director, Clara Barton Camp for Diabetes

**Major Administrative Responsibilities:**

2005-2008 Assistant Director of the Section of Clinical Research, Joslin Diabetes Center  
2005- Director, Physiology Imaging Core Facility, Joslin Diabetes Center  
2008- Head, Section of Clinical Research, Joslin Diabetes Center

**Major Committee Assignments:**

1999-2003 Harvard Medical School, Center for Excellence in Women's Health Research Council, including Grant Review, and Program Planning of 2000 Research Retreat "Recruiting Minority Women in Clinical Trials: The Intersection of Race, Gender, Community and Academia" and 2001 "Mentoring and the Role it Plays in Advancing Research Developments and Academic Career Development." Member.  
2005- Beth Israel Deaconess Medical Center General Clinical Research Center Scientific Advisory Committee (GCRC-GAC). Member.  
2006-2007 Harvard Medical School Clinical Research and Educational Council (HMSCREC). Member.  
2006- Data Safety Monitoring Board and Steering Committee: The LANCET Trial: A Randomized Clinical Trial of Lantus for C-Reactive Protein Reduction in Early Treatment of Type 2 Diabetes. Member.  
2007- Food and Drug Administration, Division of Metabolism and Endocrine Drug Products Advisory Board. Voting Member.

**Grant Review Boards:**

2000, 2001 Harvard Medical School's Center for Excellence in Women's Health Research, Member, Reviewer  
2002 National Institutes of Health, Endocrinology Study Section-Hypoglycemia, Ad Hoc Reviewer  
2005 American Institutes of Biological Science Diabetes/Obesity Research Section  
2006 American Diabetes Association, Ad Hoc Reviewer  
2006 University of Massachusetts Medical Center, Diabetes and Endocrinology Research Center, Ad Hoc Reviewer  
2006- National Institutes of Health, Clinical and Integrative Diabetes and Obesity Study Section (CIDO), Section member  
2007 Joslin Diabetes Center, Diabetes and Endocrinology Research Center, Ad Hoc Reviewer  
2007 Boston Obesity Nutrition Research Center, Ad Hoc Reviewer.

**Professional Societies:**

1988- Member, American Medical Association  
1993- Member, American Diabetes Association  
1993- Member, The Endocrine Society

**Community Service Related to Professional Work:**

1989-2005 Resident Camp Physician, Joslin and Clara Barton Camps, Children with Diabetes  
1999-2005 Medical Advisor, Clara Barton Camp

**Editorial Boards:**

1996-	Diabetes, Ad Hoc Reviewer
1997-	Journal Clinical Endocrinology and Metabolism, Ad Hoc Reviewer
1999-	Journal of Inorganic Biochemistry, Ad Hoc Reviewer
2004-	Obesity, Ad Hoc Reviewer
2004-2009	Editor, Current Opinion in Endocrinology and Diabetes, Section Diabetes and the Endocrine Pancreas I
2008	Abstract Reviewer for ADA's 68 <sup>th</sup> Scientific Sessions- Integrated Physiology- Insulin Secretion
2009	Abstract Reviewer for ADA's 69 <sup>th</sup> Scientific Sessions- Insulin Secretion
2009-	Assistant Editor-Diabetes Care

**Awards and Honors:**

1978-1981	University of Pennsylvania, Scholar in Medicine, Dean's List
1981	University of Pennsylvania, Magna Cum Laude
1996-1999	Harvard University, Department of Molecular and Cellular Biology, Corporate Associates Program (CAP) Scholarship
1999-2000	Harvard Medical School's Center for Excellence in Women's Health Award
2002	Harvard 50 <sup>th</sup> Anniversary Priscilla White Award
2002	Beth Israel Deaconess Medical Center, General Clinical Research Center Feasibility Fund Award (MO1RR01032-27), Boston, MA
2003	Mentor for Lilly Fellowship Award
2006	American Diabetes Association, Career Development Award
2006	North American Association for the Study of Obesity (NAASO) Annual Award for Outstanding Journal Article Published in Obesity
2009	Julius Litter Lecture Award, Metrowest Hospital, Framingham, MA

**PART II: Research, Teaching and Clinical Contributions****A. Narrative Description of Work**

My clinical responsibilities focus on patients with diabetes mellitus and other general endocrine disorders. In 1997, I assisted with the development of the Program for Pregnancy and Diabetes at the Brigham and Women's Hospital, where housestaff and fellows, in both internal medicine obstetrics, and endocrinology rotated through the clinics for outpatient training. This program received the Partners Award for Excellence for two consecutive years, given in recognition of outstanding performance and commitment for multi-disciplinary care. I have provided attending level care and education on the Diabetes Service Partners and Caregroup. From 2000-2005, I co-directed the weekly Joslin Diabetes Clinical Diabetes and Metabolism Conference Series, coordinating invited speakers, journal reviews, and precepting fellow case based presentations. In 2006, I directed the scientific sessions of the bi-annual Joslin Research Retreat

Research investigations focus on clinical and molecular translational projects related to insulin action and development of type 2 diabetes and diabetes related complications, especially cardiovascular disease. Such work has included evaluation of drug action, including studies that focused on evaluation of the safety and efficacy of vanadium salts in the treatment of human insulin resistance and diabetes mellitus, as well as cellular and molecular mechanisms of action of the peroxisome proliferator activated receptor- $\gamma$  (PPAR $\gamma$ ) agonists. Mechanisms of cardiovascular complications of diabetes are evaluated in humans *in vivo* using studies of endothelial dependent and endothelial independent vasodilation as influenced by hyperglycemia or hyperinsulinemia, the effects of antioxidants on restoring endothelial function, and currently the role of PKC inhibitors on vascular function.

Current projects focus on early physiologic, molecular and genetic determinants of type 2 diabetes in non-diabetic subjects at risk for development of the disease, with a focus on a family history of diabetes and obesity as genetic and acquired risk factors. Subjects are phenotyped for insulin sensitivity, insulin secretory response, and vascular function, and tissues are obtained to evaluate cellular mechanisms of insulin resistance across risk groups using a variety of gene expression and functional protein analysis techniques. Cellular and rodent data suggest that insulin secretory beta-cells contain the insulin receptor and insulin signaling proteins and may represent insulin responsive tissue. Preliminary studies in healthy humans *in vivo* suggest that insulin can enhance glucose-induced insulin secretion and studies are ongoing to determine if this effect is attenuated in insulin resistant or pre-diabetic persons.

Increasing evidence in rodents and man support an important role for subacute chronic inflammation in the pathogenesis of the metabolic syndrome, diabetes and cardiovascular disease. A large body of evidence suggests that high dose salicylates can directly target the IKK/NF-κB pathway and may improve diabetes and other aspects of the metabolic syndrome. I hold the FDA Investigational New Drug (IND) for salsalate, a drug previously used for treatment of rheumatic pain. In collaboration with Dr. (b) (6) my lab is now leading multicenter clinical trials to evaluate the safety and efficacy of targeting inflammation using salsalate in the treatment of type 2 diabetes, and to target inflammation to promote plaque remodeling in patients with coronary artery disease. Additional trials to evaluate the potential of inflammation as a target for diabetes prevention are also underway.

I have been active on the task force to improve and increase clinical research at the Joslin Diabetes Center and serve as the Assistant Director of Clinical Research at the Joslin Diabetes Center.

## **B. Research Funding Information**

1996-1998	Harvard Medical School Corporate Associates Program (CAP) Scholarship Sodium Metavanadate in the Treatment of Diabetes	PI
1996-1999	National Institute of Health M01 General Clinical Research Center (GCRC)-CAP Vanadyl Sulfate in Diabetes	PI
1996-1999	National Institutes of Health R01 Vanadium Salts in Treatment of Insulin Resistance	Co-PI
1997-1998	National Institutes of Health R01 Antioxidants and Endothelial Function in Diabetes	Collaborator
1997-2001	National Institutes of Health R01 Selective Insulin Resistance, Diabetic Vascular Disease	Collaborator
1998-2003	National Institutes of Health R01 The Role of Complement in the Complications for Diabetes	Collaborator
1999-2001	Harvard Medical School's Center for Excellence Fund for Women's Health The Role of Estrogen on Vascular Function in Insulin Resistant Women	PI
1999-2001	Investigator Initiated Pharmaceutical ( (b) (4) ) Assessment of Beta Cell Response to Oral (b) (4) and to Oral (b) (4) during Moderate Hypoglycemia	Co-PI
1999-2004	National Institutes of Health P01 Arterial Dysfunction: Basic and Clinical Mechanisms	Co-investigator
2000-2005	National Institutes of Health-K23 Physiologic and Molecular Determinants of Diabetes	PI
2000-2001	Clinical Trial ( (b) (4) )	site PI

	Study to Evaluate (b) (4) as a Technique for Non-Invasive Measurement of Glucose	
2002-2003	Beth Israel Deaconess Medical Center General Clinical Research Center Clinical Research Feasibility Funds The Study of Endogenous Hormone Cycling on Vascular Function in Women with Type 1 Diabetes	PI
2004-2006	Clinical Trial (b) (4) Efficacy and Safety of (b) (4) in Type 2 Diabetes	site PI
2005-2006	Clinical Trial (b) (4) A Double-Blind, Placebo-Controlled Study Exploring the Safety, Tolerability, and Pharmacodynamic Effect of (b) (4) in Centrally Obese Subjects with Insulin Resistance	site PI
2005-2009	National Institute of Health R01 The Role of Insulin in Regulation of the $\beta$ -cell	PI
2006-2010	American Diabetes Association The Role of Insulin in Regulation of the $\beta$ -cell <i>in vivo and in vitro</i>	PI
2006-2010	Targeting Inflammation in Type 2 Diabetes: Clinical Trial Using Salsalate	Co-PI
2006-2011	SCCOR: Metabolic Syndrome Inflammation and Vascular Remodeling Project 4: Insulin Resistance, Inflammation and Vascular Remodeling	PI
2009-	Clinical Trial (b) (4) and (b) (4) (b) (4) - A Randomized Trial Comparing (b) (4)	site PI

## D. Teaching

### 1. Local Contributions

#### a. Harvard Medical School

1995-1999	Ambulatory Clerkship, Didactic Sessions in Diabetes Mellitus Instructor 18-22 3 <sup>rd</sup> and 4 <sup>th</sup> Year Medical Students (1 hr/mo preparation, 3 hrs/mo teaching)
1995-1997	Physiology, Thyroid Exercise Leader Instructor 8-12 1 <sup>st</sup> Year Medical Students (2 hrs/yr preparation, 1 day/yr teaching)
1998-2002	Integrated Human Physiology, Course Lecturer (150 students), exercise leader and curriculum designer for endocrine section Instructor 18-22 1 <sup>st</sup> Year Med Students, (70 hrs/yr preparation, 2 hrs/yr teaching)
2003	Principles of Pharmacology Instructor 150 Students (1 hr/yr preparation, 2hrs/yr teaching)
2007-	Role of Discovery in Medicine Course Seminar leader 15 Medical and Dental Students (1 hr/yr preparation, 5 hrs/yr teaching)
2008-	Design of section on patient interview Diabetes/Obesity (4 hr/yr preparation of video and teaching materials)

2009- Co-director of Health Science and Technology Endocrinology (HST60),  
(70 hr/yr preparation of materials, coordination of lecturers, presentations)

**c. Local Invited Teaching Presentations:**

- 1998 Insulin Sensitizing Agents, Medical Grand Rounds, Brigham and Women's Hospital, Boston, MA 100-125 Attending, Housestaff and Students (4hr preparation, 1 hr teaching)
- 2005 The Role of Insulin in Regulation  $\beta$ -cells in Humans *in vivo*, Clinical Diabetes and Metabolism Conference Series of the Joslin Diabetes Center, Boston, MA 100-125 Attending, Housestaff, Postdoctoral Fellows, Students and Nurses (4 hr preparation, 1 hr teaching)
- 2005 Severe Hypoglycemia Post-Gastric Bypass Requiring Partial Pancreatectomy: Evidence for Inappropriate Insulin Secretion and Pancreatic Islet Hyperplasia. Pathology Grand Rounds, Brigham and Women's Hospital, Boston, MA 40-50 Pathologists and Fellows (4 hr preparation, 1 hr teaching)
- 2007 Targeting Inflammation in the Treatment of Diabetes, Clinical Diabetes and Metabolism Conference Series of the Joslin Diabetes Center, Boston, MA Attending, Housestaff, Postdoctoral Fellows, Students and Nurses (4 hr preparation, 1 hr teaching)
- 2009 Hypoglycemia, Incretins and Bariatric Surgery, Surgical Teaching Series of the Brigham and Women's Hospital, Boston, MA. Attending Surgical Residents, Fellows and Attendings. (3 hours preparation, 1 hr teaching)

**d. Continuing Medical Education Courses:**

- 2000- Office Practice of Primary Care Medicine -Diabetes Management  
(Harvard Medical School CME)  
Lecturer 50-70 physicians  
(6 hrs/yr preparation, 4 hr/yr teaching)

**e. Advisory and Supervisory Responsibilities in Clinical or Laboratory Setting**

- 1991-2002 Attending Physician in Diabetes, Brigham and Women's Hospital and Beth Israel Deaconess Medical Center. Discussion of cases and subjects pertinent to endocrine and diabetes for fellows, residents and medical students. Clinical research mentor to fellows in studies of endocrine and metabolism. (30 hr/yr)

**f. Teaching Leadership:**

- 1991-2004 Teaching of medical students, residents and fellows while Attending Physician at the Brigham and Women's Hospital and/or Beth Israel Deaconess Medical Center. (3 mo/yr)
- 2000-2004 Director of the Joslin Diabetes Center Clinical Diabetes and Metabolism Seminar Series. Planning of curriculum for seminar series, inviting local and distant speakers. Reviewing cases and journals with fellows for presentation. (30-40 hr/yr)
- 2005- Assistant Director of the Section of Clinical Research, Joslin Diabetes Center Instruction to postgraduate and medical house staff and fellows in clinical research and physiology.  
Instructor 10-12 Postgraduates and Physicians  
(5 hr/yr preparation, 60 hrs/yr teaching)

- 2006 Joslin Bi-Annual Research Retreat, Director of Scientific Sessions  
The Research Division consists of 35 laboratories with 130 MD/PhD fellows and total audience of 300-350 investigators and trainees.  
Lecturer, and Seminar Director (25 hrs)
- 2007 Beth Israel Deaconess Medical Center, Tullis Firm Conference,  
Cased Based Seminars-Hypoglycemia, Expert Attending, 30 housestaff and medical students (1.25 hrs)
- 2008 Beth Israel Deaconess Medical Center, Kirkland Firm Conference,  
Cased Based Seminars-Diabetes, Obesity and Hypoglycemia, Expert Attending, 30 housestaff and medical students (1.25 hrs),  
Journal Club Faculty Discussant, 30 housestaff (1.5 hrs)
- 2008 American Diabetes Association's 68th Scientific Sessions in San Francisco  
Member of the Planning Committee and Session Chair for Symposia *Skeletal Muscle and Vascular Function - Benefits of Exercise*, Oral Session Chair at the *Obesity---Pathogenesis and Treatment* session, and Abstract Reviewer for *Integrated Physiology-Insulin Secretion* (30 hours)
- 2009 American Diabetes Association's 69th Scientific Sessions Abstract Reviewer for *Integrated Physiology-Insulin Secretion* (30 hours)

**g. Advisees or Trainees**

- 2001-2003 (b) (6)  
Awarded 2003 (b) (6) Research Fellow Award  
for clinical research performed during training.  
Current Position: Chief of Diabetes, Faculty of Medicine, (b) (6) University, (b) (6)
- 2001-2003 (b) (6)  
Current Position: (b) (6) Clinical Consultant and Lecturer Referee) In  
Endocrinology, (b) (6)
- 2002-2004 (b) (6)  
Current Position: Staff Physician, (b) (6)
- 2004-2005 (b) (6)  
Awarded the (b) (6) Research Fellowship and Award in the Oral Presentation  
Competition at (b) (6)  
during training  
Current Position: Medical Director, (b) (6)  
Medical Center, (b) (6)
- 2004-2006 (b) (6)  
Awarded (b) (6) Fellowship and (b) (6) Fellowship  
Award during training.  
Current Position: Instructor in Medicine, (b) (6) Medical School, Assistant in Pediatrics at  
(b) (6) Hospital (b) (6) Division of Endocrinology, Assistant in Pediatrics at (b) (6)  
Hospital, Dept of Pediatrics, (b) (6)

2006-2008 (b) (6)  
 Current Position: Assistant Professor Pediatric Endocrinology, University of (b) (6)  
 (b) (6)

2006-2008 (b) (6)  
 Current Position: National Medical Advisor, (b) (6)

2006-2008 (b) (6)  
 Awarded (b) (6) Fellowship.  
 Current Position: Instructor in Medicine, (b) (6) Medical School, Clinical Research Fellow,  
 (b) (6)

2006- (b) (6)  
 Awarded the 2006 (b) (6) Fellowship (b) (6)  
 during training.  
 Current Position: Instructor in Medicine, (b) (6) Medical School, Clinical Research Fellow,  
 (b) (6)

2008- (b) (6)  
 Current Position: Fellow in Medicine, (b) (6) Medical School, Clinical Research Fellow, (b) (6)  
 (b) (6) Hospital

## 2. Regional, National or International Lectures

### a. Invited Lectures

#### Regional

- 2004 Insulin Resistance and Familial Risk in Physiology and Function of the Endothelium, IBC 2<sup>nd</sup> International Conference, Targeting Metabolic Syndrome, Boston, MA
- 2005 Salicylate Treatment in Insulin Resistance and Type 2 Diabetes, Endocrine Grand Rounds, New England Medical Center, Boston, MA
- 2005 Does Glycemia Matter in the Clinical Management of Obesity, the Metabolic Syndrome and Diabetes, Harvard International Cardiovascular Symposium, Boston, MA
- 2007 Modern Management of Diabetes: Insights into New Pharmacologic Strategies. Thrombolysis in Myocardial Infarction (TIMI) Group Grand Rounds, Boston, MA
- 2007 Therapeutic Opportunities Targeting Inflammation in Humans, Obesity and Inflammation Symposium of the Annual Nutrition Symposium Program, Boston, MA
- 2007 The Current Status of Comprehensive Diabetes Management, Cardiovascular Complications of Obesity, the Metabolic Syndrome, and Diabetes International Conference, Boston, MA
- 2008 Therapeutic Opportunities Targeting Inflammation in Obesity and Type 2 Diabetes: Clinical Implications. Endocrine Grand Rounds, Boston Medical Center, Boston, MA
- 2008 Using Existing Clinical Data for Pharmacovigilance/Surveillance, Instrumenting the Healthcare Enterprise for Discovery Symposium, Boston, MA
- 2008 Metabolic Benefits and Disadvantages of Bariatric Surgery, Clinical Endocrinology Update (CEU): 2008, Boston, MA
- 2008 Therapeutic Opportunities Targeting Inflammation in Metabolic Syndrome, Cardiovascular Grand Rounds, Brigham and Women's Hospital, Boston, MA



- 2009 Therapeutic Opportunities Targeting Inflammation in Type 2 Diabetes and Cardiovascular Disease. Julius Litter Award Lecture, Metrowest Medical Center, Framingham, MA.

#### **National**

- 1998 Vanadium Salts in the Treatment of Noninsulin Dependent Diabetes Mellitus, Endocrine Grand Rounds, National Institute of Health, Bethesda, MD
- 2001 Thiazolidinediones in Type 2 Diabetes and Syndromes of Insulin Resistance. Digital Gene Technologies, La Jolla, CA
- 2002 Estrogen Action on the Vascular Wall, Plenary Presentation, American Diabetes Association, San Francisco, CA
- 2003 Management of Type 2 Diabetes, Endocrine Society, Philadelphia, PA
- 2004 Salicylates in the Treatment of Insulin Resistance and Type 2 Diabetes, Endocrine Grand Rounds, University of Pennsylvania, Philadelphia PA
- 2007 Therapeutic Opportunities Targeting Inflammation in Obesity and Type 2 Diabetes: Clinical Implications, Clinical Scholars Award Series Grand Rounds, Rockefeller University, NY
- 2008 Therapeutic Opportunities Targeting Inflammation in Obesity and Type 2 Diabetes: Clinical Implications. Endocrine Grand Rounds, Columbia University, NY
- 2008 Targeting Inflammation in Obesity, Type 2 Diabetes, and Cardiovascular Disease. Cardiovascular Research Seminar, Washington University, St. Louis, MI
- 2008 Opportunities Targeting Inflammation in Obesity and Type 2 Diabetes: Salicylates as Therapeutic Agents, The Obesity Society, Phoenix, AZ
- 2009 The Role of Inflammation in Type 2 Diabetes, American Diabetes Association 56th Annual Advanced Postgraduate Course, New York City, NY
- 2009 The role of gut peptides (GLP-1, GIP, PYY, others) on Beta Cells. The Beta Cell Function Symposium organized by The Metabolic Disorders Steering Committee of The Biomarkers Consortium, a public private partnership of the Foundation for the National Institutes of Health, Washington DC

#### **International**

- 1997 Vanadium salts in the treatment of Human Diabetes Mellitus, Vanadium Symposium, 5<sup>th</sup> Chemical Congress of North America, Mexico
- 2007 Hyperinsulinemic Hypoglycemia Post-RNY Gastric Bypass, Diabetes Surgery Summit Meeting, Rome, Italy
- 2007 Targeting Inflammatory Pathways for Insulin Resistance, Obesity and Type 2 Diabetes: Clinical Implications. 4<sup>th</sup> Annual Endocrinology Canada International Symposium-Risk Factors for Obesity, Insulin Resistance & Cardiovascular Disease, Toronto, Canada
- 2007 Practical and Potential Roles of Anti-inflammatory Agents and Antioxidants in the Treatment of Diabetes. 4<sup>th</sup> Annual Endocrinology Canada International Symposium-Risk Factors for Obesity, Insulin Resistance & Cardiovascular Disease, Toronto, Canada
- 2008 Hypoglycemia, Incretins, and Bariatric Surgery, Canadian Diabetes Association/Canadian Society of Endocrine and Metabolism, Montreal, Canada

#### **b. Professional and Educational Leadership Role**

1998-2004,      Mentor for Northeastern University Cardiopulmonary Science Cooperative  
and 2007      Program (15-30 hr/yr)

#### **E. Report of Clinical Activities**

- a. Clinical practice: Endocrinology Clinic- focus on diabetes, syndromes of insulin resistance and diabetes in pregnancy, about 1 day per week.
- b. Clinical Program Development-Development of Clinical Program in Diabetes and Pregnancy awarded "Partners Excellence Award" for performance and commitment to excellence-December, 1997 & 1998.
- c. Time commitments: 10% Clinical, 80% Research, 10% Administration and Community Service

### **PART III: BIBLIOGRAPHY**

#### **Original Reports**

1. Cooper RA, **Braunwald AD**, Kuo AL. Phorbol ester induction of leukemia cell differentiation is a membrane mediated process. *Proc Natl Acad Sci USA*, 1982; 79:2865-69.
2. Kaye TB, Rubin RA, **Goldfine AB**, Rajamani K, Kinsley BT, Visser UM, Simonson DC. Effect of glycemic control on the overnight dexamethasone suppression test in patients with diabetes mellitus. *J Clin Endocrinol Metab.*, 1992; 74:640-4.
3. Magre J, **Goldfine AB**, Warram JH, Krolewski AS, Kahn CR. Analysis of the insulin receptor gene in non-insulin dependent diabetes mellitus by denaturing gradient gel blots: a clinical research center study. *J Clin Endocrinol Metab.*, 1995; 80:1882-87.
4. **Goldfine AB**, Simonson DC, Folli F, Patti ME, Kahn CR. Metabolic effects of sodium metavanadate in humans with insulin-dependent and noninsulin-dependent diabetes mellitus in vivo and in vitro studies. *J Clin Endocrinol Metab.*, 1995; 80:3311-20.
5. Williams SB, **Goldfine AB**, Timimi FK, Ting HH, Roddy MA, Simonson DC, Craeger MA. Acute hyperglycemia attenuates endothelium-dependent vasodilation in humans in vivo. *Circulation*, 1998; 97:1965-701.
6. **Goldfine AB**, Patti ME, Zuberi L, Goldstein BJ, LeBlanc R, Landaker EJ, Jiang ZY, Willsky GR, Kahn CR. Metabolic effects of vanadyl sulfate in humans with non-insulin dependent diabetes mellitus: in vivo and in vitro studies. *Metabolism*, 2000; 49:400-10.
7. Acosta J, Hettinga J, Fluckiger R, Krumrei N, **Goldfine AB**, Angarita L, Halperin J. Molecular basis for a link between complement and the vascular complications of diabetes. *Proc Natl Acad Sci USA*, 2000; 97:5450-55.
8. Beckman JA, **Goldfine AB**, Gordon MB, Craeger MA. Ascorbate restores endothelium-dependent vasodilation impaired by acute hyperglycemia in humans. *Circulation*, 2001;103:1618-23.
9. Willsky GR, **Goldfine AB**, Kostyniak PJ, McNeill JH, Yang LQ, Kahn HR, Crans DC. Effect of vanadium (IV) compounds in the treatment of diabetes: *in vivo* and *in vitro* studies with vanadyl sulfate and bis(maltolato)oxovanadium (IV). *J Inorg Biochem.*, 2001; 85:33-42.
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11. **Goldfine AB**, Ebbeling CB, Ludwig DS. Antegrade intravenous catheterization for metabolic studies in man. *Diabetologia*, 2002; 45: 1742-3
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13. Varo N, Vicent D, Libby P, Nuzzo R, Calle-Pascual AL, Bernal MR, Fernandez-Cruz A, Veves A, Jarolim P, Varo J, **Goldfine AB**, Horton E, Schonbeck U. Elevated plasma levels of the atherogenic mediator soluble CD40 ligand in diabetic patients: a novel target of thiazolidinediones. *Circulation*. 2003; 107:2664-9.
14. Patti ME, Butte AJ, Crunkhorn S, Cusi K, Berria R, Kashyap S, Miyazaki Y, Kohane I, Costello M, Saccone R, Landaker EJ, **Goldfine AB**, Mun E, DeFronzo R, Finlayson J, Kahn CR, Mandarino LJ. Coordinated reduction of genes of oxidative metabolism in humans with insulin resistance and diabetes: Potential role of PGC1 and NRF1. *Proc Natl Acad Sci U S A*, 2003; 100:8466-71.
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28. Beckman J, **Goldfine AB**, Dunaif A, Gerhard-Herman M, Creager M. Endothelial function varies according to insulin resistance disease type. *Diabetes Care.* 2007 May;30(5):1226-32.
29. Bently-Lewis R, **Goldfine AB**, Green DE, Seely EW. Lactation after Normal Pregnancy is Not Associated with Blood Glucose Fluctuations. *Diabetes Care.* 2007 Nov;30(11):2792-3
30. **Goldfine AB**, Mun EC, Devine D, Bernier R, Baz-Hecht M, Jones DB, Schneider BE, Holst JJ, Patti ME. Patients with Neuroglycopenia Post Gastric Bypass Surgery Have Exaggerated Incretin and Insulin Secretory Responses to Mixed Meal. *J Clin Endocrinol Metab.* 2007 Dec;92(12):4678-85.
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